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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,874	03/02/2004	David B. Chadwick	83961	4722
32697	7590	04/06/2005	EXAMINER	
SUN, XIUQIN				
ART UNIT			PAPER NUMBER	
			2863	

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/790,874 Examiner Xiuqin Sun	CHADWICK ET AL. Art Unit 2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 02 March 2004.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-22 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 1-9 is/are allowed.  
 6) Claim(s) 10-22 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 02 March 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because of the following informality:

It contains informality legal phrases "comprises". Correction is required. See MPEP § 608.01(b).

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2863

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reay et al. (U.S. Pat. No. 5274434) in view of Jogan et al. (U.S. Pat. No. 4628748).

Reay et al. teach a method and apparatus for a tidal seepage meter (Abstract; col. 3, lines 14-22 and lines 46-52), the method comprising the steps of: positioning said seepage meter in sediment (col. 3, lines 37-52; and col. 4, lines 17-37); sampling seepage, and retrieving seepage samples (col. 4, lines 17-65). Reay et al. further teach: preparing said seepage meter (cols. 5-6, lines 60-9); equilibrating said tidal seepage meter (cols. 5-6, lines 60-9); activating said seepage meter (cols. 5-6, lines 60-9); rotating a selector valve to a plugged port if sampling is completed (cols. 3-4, lines 55-16).

Reay et al. do not mention explicitly: transferring a sampling schedule having at least two sampling times; and sampling seepage in accordance with said sampling schedule. Ready et al. also do not mention explicitly: said step and mean of preparing the meter comprises clearing all plumbing; said step and means of sampling seepage in accordance with said sampling schedule further includes the sub-steps/means: determining whether scheduled rotation time has occurred; returning to said determining step if said rotation time has not occurred; rotating a selector valve if said rotation time has occurred; determining whether sampling is completed; and returning to said determining step if sampling is not completed.

Jogan et al. teach an effluent sampler (Abstract), including: preparing said sampler, comprising clearing all plumbing (col. 3, lines 1-14; cols. 6-7, lines 54-38); equilibrating said sampler (col. 3, lines 1-14; and col. 8, lines 54-59); activating said sampler (cols. 6-7, lines 54-38); transferring a sampling schedule having at least two sampling times (cols. 7-8, lines 33-53); and sampling effluent seepage in accordance with said sampling schedule (col. 1, lines 32-62; and cols. 7-8, lines 39-53). The teaching of Jogan et al. further includes: said step and means of sampling seepage in accordance with said sampling schedule further includes the sub-steps/means (cols. 7-8, lines 39-53); determining whether scheduled rotation time has occurred; returning to said determining step if said rotation time has not occurred; rotating a selector valve if said rotation time has occurred; determining whether sampling is completed; and returning to said determining step if sampling is not completed.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Jogan et al. in the invention of Reay et al. in order to sample the seepage on a statistically representative basis (Jogan et al., col. 1, lines 32-36).

***Allowable Subject Matter***

5. Claims 1-9 are allowed.

***Reasons for Allowance***

6. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claims 1-9 is the inclusion of the limitations of: a selector valve comprising an input port and at least two outlet ports, operatively coupled to said motor, capable of selecting an output valve in accordance with a sampling schedule; and at least two sample containers, operatively coupled to said selector valve via at least two output valves, capable of receiving seepage from said selector valve via said output valve. It is these limitations found in each of the claims, as they are claimed in the combination that have not been found, taught or suggested by the prior art of record, which make these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Prior Art Citations***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Martin et al. (Journal of Sedimentary Research; January 2003; v. 73; no. 1; p. 128-132; DOI: 10.1306/070802730128) is entitled to "A multi-level pore-water sampler for permeable sediments".

***Contact Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280. The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Xiuqin Sun  
Examiner  
Art Unit 2863

XS  
April 1, 2005

  
MICHAEL NGHIEM  
PRIMARY EXAMINER